Information Gathering and Selection

Introduction

- Information gathering and selection are crucial for graduate research and professional work.
- Skills in this area are necessary for producing high-quality written and oral presentations.
- These skills support academic success, lifelong learning, and professional capabilities.

Theoretical Foundations of Information Literacy

Defining Information Literacy

- Information literacy is the ability to:
  - Reflectively discover information.
  - Understand how information is produced and valued.
  - Use information to create new knowledge.
  - Participate ethically in learning communities.
- At the graduate level, information literacy involves:
  - Understanding research processes.
  - Evaluating sources.
  - Ethical information use.

The Information Process Model

- A structured approach to research:

1. Recognize an information need: Formulate clear research questions/objectives.
2. Locate information: Use strategic searches in databases and scholarly resources.
3. Select and evaluate sources: Determine credibility, relevance, and accuracy.
4. Organize and synthesize: Construct new insights from gathered information.
5. Communicate findings: Present information effectively in written or oral form.

Information Gathering

Identifying Information Needs

- Articulate the research question or problem statement clearly.
- Break down complex questions into sub-questions or thematic areas for targeted searches.
- Ensure research remains focused and manageable.

Locating Information

- Use academic databases (e.g., JSTOR, PubMed, Scopus) for peer-reviewed literature.

- Employ effective keyword selection, including synonyms and controlled vocabulary.
- Understand and use Boolean operators (AND, OR, NOT) and advanced search filters for precise results.

Gathering Techniques

- **Literature Review:** Systematic collection and synthesis of existing research to establish current knowledge and identify gaps.
- **Surveys and Questionnaires:** Collection of quantitative and qualitative data from specific populations.
- **Interviews and Observations:** In-depth insights into particular phenomena. Requires careful planning for validity, reliability, and ethical compliance.

Evaluating Source Credibility

- Assess the author's qualifications.
- Evaluate the reputation of the publication.
- Check for peer review.
- Be vigilant for potential biases and conflicts of interest.
- Look for methodological weaknesses.
- Cross-reference information from multiple reputable sources to confirm accuracy.

Information Selection

Criteria for Selection

- **Relevance:** Does the information directly address the research question?
- **Authority:** Is the source credible and trustworthy?
- **Currency:** Is the information up-to-date, especially in rapidly evolving fields?
- **Accuracy:** Is the information supported by evidence?
- **Purpose:** What is the source's intention, and could there be any biases?

Data Selection Process

- Align the type of data with the research objectives.
- Ensure data collection instruments are appropriate and validated.
- Maintain transparency in selection criteria for academic integrity.
- Avoid selective reporting; consider all relevant data.

Practical Selection Techniques

- Skim abstracts and executive summaries to assess relevance.
- Scan for key terms and headings.
- Use systematic note-taking methods (annotated bibliographies, reference management software).
- Compare findings across multiple sources.

- Consult with peers for additional perspectives.

Written Presentation of Information

Structuring Academic Writing

- Typical structure: Introduction, Literature Review, Methodology, Results, Discussion, Conclusion.
- **Introduction:** Contextualizes the research problem and outlines objectives.
- **Literature Review:** Synthesizes existing knowledge.
- **Methodology:** Details the research design and procedures.
- **Results:** Presents findings clearly, often with visual aids.
- **Discussion:** Interprets findings in relation to the literature.
- **Conclusion:** Summarizes key insights and suggests future research.

Clarity and Precision

- Avoid unnecessary jargon; define technical terms.
- Sequence arguments logically with evidence from credible sources.
- Write concisely and coherently.

Visual Aids

- Use tables, graphs, and charts to enhance data presentation.
- Label visuals clearly and integrate them into the text with explanations.

Oral Presentation of Information

Planning and Structuring an Oral Presentation

- Structure with a clear introduction, main body, and conclusion.
- Identify key messages and tailor them to the audience's knowledge level.
- Manage time effectively.

Delivery Techniques

- Articulate clearly, pace appropriately, and use strategic pauses.
- Use visual aids (slides) to complement the spoken content.
- Engage the audience with eye contact, gestures, and interactive elements.

Handling Questions and Feedback

- Anticipate potential questions and prepare responses.

- Listen actively and answer respectfully.
- Welcome constructive feedback for future improvement.

Ethical Considerations

- Proper citation and referencing to prevent plagiarism.
- Present information objectively and avoid data manipulation.
- Follow ethical guidelines in primary data collection (informed consent, confidentiality).